

B
a
waves with low damping, the sandwich plate (3, 20, 39, 60) is freely supported by holding elements (12, 24, 25, 34, 35) with low damping, and that the holding elements (12, 24, 25, 34, 35) are designed to be low damping at higher sound frequencies,

wherein the sandwich plate (3) has two thin, hard cover plates (9, 10) with a shear resistant, thin core layer (11) placed between them, and

wherein the core layer includes a foil which contains periodically repeated bulges (31) produced by embossing.

REMARKS

The Office Action dated March 13, 2003 has been received and its contents carefully studied. Reconsideration of the rejections of the claims is respectfully requested in view of the foregoing amendments and the following remarks. Claim 1 is the only independent claim, aside from new claims 23 and 24. Claim 1 is rejected as being obvious under 35 U.S.C. § 103(a) from *Azima* (U.S. Patent No. 6,327,369).

Dependent claims 2-6 and 17-22 are also rejected as being obvious from *Azima* (U.S. Patent No. 6,327,369). Claims 7, 8, and 15 are rejected as being obvious from *Azima* in view of *Sakamoto* (U.S. Patent No. 4,300,655) or alternatively in view of *Watters* (U.S. Patent No. 3,347,335).

Claims 9-14 and 16 are indicated to be allowable in the Office Action Summary, but claim "19" instead of claim "16" is indicated to be allowable on page 5, section 5 of the Office Action. Clarification is respectfully requested.

Drawings and Indefiniteness Rejections

The Office Action asserts that the drawings should be revised so that they show the claim 4 feature according to which "the core layer 11 contains a spatially different distribution of the elastomechanical properties." The Applicant respectfully submits that page 2, section 2 of the Office Action is incorrect when it says that this claim 4 feature is not discussed in the specification; in fact, this feature is discussed at page 4, lines 8-14 of the application. Likewise, the Applicant respectfully submits that this feature is adequately shown in the figures. In particular, Figure 6 shows cutting the

core layer 11, as described in the application at page 4, lines 8-14 and 21-33; page 9, lines 12-23. Therefore, a revision of the figures, or further support in the specification, should not be necessary.

Claim Rejections

Regarding the rejection of independent claim 1, the Examiner states that *Azima* discloses a “driver (T)” but actually *Azima*’s “T” represents an optional tweeter (column 5, lines 23 and 47) rather than the driver. Moreover, *Azima* does not say anything about the properties of that optional tweeter (T).

Azima’s abstract does describe a “drive means (9),” but nowhere does *Azima* teach or suggest that the drive means 9 is for causing excitations at high sound frequencies as presently claimed. The only technique that *Azima* discloses for achieving high sound frequencies is to use soft foam materials in a weak core (column 3, lines 45-50), instead of using a cellular structure (column 3, lines 17-21; Fig. 2b). *Azima* therefore is not a compelling reference, especially with respect to present claim 3 which discloses a honeycomb core in combination with a high frequency driver.

Regarding the sandwich plate, the Office Action is correct that *Azima*’s sandwich plate is the radiator 2. However, the Office Action does not point to anything in *Azima* that describes the radiator 2 as being sufficiently “thin” so that it can be excited into multiple reflected waves, as presently claimed.

Azima teaches that (2) supports launch bending waves into panel. (2) is not better defined, therefore, Azima fails to teach a thin panel.

New Claims

The Applicant now adds a new independent claim that is the same as present allowed claim 9, except that it does not include the limitations of claims 3-6 and 8. The Applicant is also now adding an additional independent claim that is the same as present rejected claim 7, except that it does not include the limitations of claims 3-6, but does include the limitation of claim 9 according to which the bulges are arranged to face in the same direction in straight rows. In contrast, the bulges in figure 8 of *Sakamoto*, and the bulges in figure 9 of *Watters*, are arranged in a circular pattern. Note that claim 7 is also slightly amended.

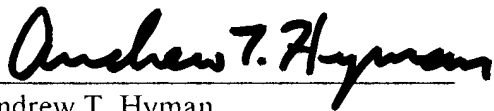
CONCLUSION

For all of these reasons, it is not perceived how the claimed invention can be derived from the related art, or how it might be obvious in view of the related art. The references cited do not suggest what is set out in the applicant's claims either before or after the present amendments, and do not provide the basis for developing the invention to persons having ordinary skill in the art to which the subject matter pertains. Therefore, withdrawal of the rejections is respectfully requested, and early allowance is most earnestly solicited.

Respectfully submitted,

Dated: July 11, 2003

WARE, FRESSOLA, VAN DER
SLUYS & ADOLPHSON LLP
Building Five, Bradford Green
755 Main Street, P.O. Box 224
Monroe, CT 06468
Telephone: (203) 261-1234
Facsimile: (203) 261-5676
USPTO Customer No. 004955


Andrew T. Hyman
Attorney for Applicant
Registration No. 45,858